What is claimed is:

1. A method of controlling a dissolution rate of a bioactive agent, the method comprising:

selecting a desired dot topography corresponding to a target dissolution rate;

applying a bioactive agent to a delivery substrate to form dots having the desired dot topography on the delivery substrate.

2. The method of claim 1, wherein a dot topography of each of the dots is characterized by a standard deviation of topographical surface area that is less than approximately 15% of a mean topographical surface area.

3. The method of claim 1, wherein applying the bioactive agent to the delivery substrate includes heating a solution carrying the bioactive agent with a thermal ejection element.

4. The method of claim 1, wherein applying the bioactive agent to the delivery substrate includes displacing a solution carrying the bioactive agent with a piezoelectric ejection element.

5. The method of claim 1, wherein applying the bioactive agent to the delivery substrate includes ejecting drops of solvent carrying the bioactive agent in a concentration based on the desired dot topography.

6. The method of claim 1, wherein applying the bioactive agent to the delivery substrate includes ejecting drops of solvent carrying the bioactive agent, wherein the drops have a drop volume based on the desired dot topography.

7. The method of claim 1, wherein applying the bioactive agent to the delivery substrate includes ejecting drops of solvent carrying the bioactive agent onto the delivery substrate and drying the solvent based on the desired dot topography.

8. A bioactive dosage form, comprising:

a delivery substrate; and

a plurality of dots of bioactive agent on the delivery substrate, wherein each of the plurality of dots has substantially similar crystal morphologies.

9. The bioactive dosage form of claim 8, wherein the crystal morphology of each of the plurality of dots is characterized by a standard deviation of topographical surface area that is less than approximately 15% of a mean topographical surface area.

10. The bioactive dosage form of claim 8, wherein the delivery substrate includes an ingestible media.

11. The bioactive dosage form of claim 9, wherein the delivery substrate includes at least one of starch, glycerin, gelatin, wheat gluten, hydroxypropylmethylcellulose, methocel, pectin, xanthan gum, guar gum, algin, pullulan, sorbitol, seaweed, polyvinyl alcohol, polymethylvinylether, poly-(2-ethyl 2-oxazoline), polyvinylpyrrolidone, milk proteins, rice paper, potato wafer, and films made from restructured fruits and vegetables.

12. The bioactive dosage form of claim 9, wherein the delivery substrate includes pullulan.

13. A bioactive dosage form, comprising:

a delivery substrate; and

a plurality of dots of bioactive agent applied to the delivery substrate according to application parameters set to produce dot topographies yielding a target dissolution rate.

14. The bioactive dosage form of claim 13, wherein the dot topography of each of the plurality of dots is characterized by a standard deviation of topographical surface area that is less than approximately 15% of a mean topographical surface area.

15. The bioactive dosage form of claim 13, wherein the delivery substrate includes an ingestible media.

16. The bioactive dosage form of claim 13, wherein the delivery substrate includes at least one of starch, glycerin, gelatin, wheat gluten, hydroxypropylmethylcellulose, methocel, pectin, xanthan gum, guar gum, algin, pullulan, sorbitol, seaweed, polyvinyl alcohol, polymethylvinylether, poly-(2-ethyl 2-oxazoline), polyvinylpyrrolidone, milk proteins, rice paper, potato wafer, and films made from restructured fruits and vegetables.

17. The bioactive dosage form of claim 13, wherein the delivery substrate includes pullulan.

18. A bioactive agent application system, comprising:

a plurality of nozzles;

ejectors paired with the plurality of nozzles, wherein each nozzle and ejector pair is collectively configured to selectively eject a bioactive agent in drops of solution configured to form dots having a desired dot topography corresponding to a target dissolution rate.

19. The bioactive agent application system of claim 18, wherein the dot topography of each of the dots is characterized by a standard deviation of topographical surface area that is less than approximately 15% of a mean topographical surface area.

20. The bioactive agent application system of claim 18, wherein each ejector includes a thermal ejection element configured to selectively heat the solution carrying the bioactive agent.

21. The bioactive agent application system of claim 18, wherein each ejector includes a piezoelectric ejection element configured to selectively displace the solution carrying the bioactive agent.

22. The bioactive agent application system of claim 18, further comprising a solution reservoir configured to supply each nozzle and ejector pair with solution having a concentration of bioactive agent selected to achieve the desired dot topography upon ejection from the nozzles.

23. The bioactive agent application system of claim 18, wherein the nozzles are sized to eject drops having volumes selected to produce the desired dot topography.

24. The bioactive agent application system of claim 18, further comprising a dryer configured to dry ejected solution at a rate selected to produce the desired dot topography.